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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/733,609	12/08/2000	Jonathan D. Courtney	SUN1P504/P4149	7286
22434	7590	12/01/2004	EXAMINER	
BEYER WEAVER & THOMAS LLP			SALCE, JASON P	
P.O. BOX 778			ART UNIT	
BERKELEY, CA 94704-0778			PAPER NUMBER	
			2611	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Up

Office Action Summary

Application No.

09/733,609

Applicant(s)

COURTNEY ET AL.

Examiner

Jason P Salce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/23/2004 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 21-22, 25-27, 31-36 and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (U.S. Patent No. 6,675,385) in view of Kim et al. (U.S. Patent No. 6,209,131) in further view of Balabanian et al. ("An Introduction to Digital Storage Media – Command and Control, November 1996).

Referring to claim 21, Wang discloses providing access to data that is periodically transmitted by a broadcaster in a broadcast system (see Column 3, Lines 59-61 and Figure 1).

Wang also discloses receiving, by a receiver in said broadcast system (see element 24 in Figure 1), a selection that identifies a first data portion in a plurality of

data portions that are periodically transmitted by said broadcaster in said broadcast system (see again Column 3, Lines 59-61 for periodically transmitting a first data portion (updated EPG data) in a plurality of data portions (the EPG data) and Column 6, Lines 53-55 for the viewer making a selection for the EPG data transmitted periodically).

Wang also discloses providing a first carousel object for selection (see Column 6, Lines 5-8 for providing a first carousel object and Column 6, Lines 53-55 for allowing a user to select the provided carousel object).

Wang also discloses receiving said first data portion via said first carousel object (see Column 7, Lines 22-30 for receiving the first carousel object).

Wang also discloses determining whether said first data portion is available in a storage used to store said periodically transmitted data and providing access to said first data portion in said broadcast system when said determining determines that said first data portion is available in said storage (see Column 8, Lines 49-59 for a Channel Guide Broadcast Event, which downloads EPG data in the background so that when a viewer tunes to a channel before the viewer tunes to the channel). An example is shown in Figures 4-5, where the movie Blankman is selected a first portion of data, downloaded in advance is displayed, therefore when the channel is selected, it is determined if the Channel Guide Broadcast Event has downloaded the data immediately to the settop box (i.e. stored in the cache, as described in Column 8, Lines 49-59).

Wang also discloses storing said first data portion **via said first carousel object** (see arguments above for receiving a carousel object) in said storage when said

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determining determines that said first data portion is not available in said storage (see Column 8, Lines 47-48 for a Channel Guide Simulcast Event and Column 8, Lines 24-34 for downloading simulcast data only when a viewer tunes to a specific channel, therefore the simulcast data is inherently not available in the storage and must be downloaded from the carrousel).

Wang also discloses that a delay of a few seconds is possible when waiting for the simulcast data to be downloaded, but fails to specifically disclose sending a notification when said first data portion has been stored in the storage device and becomes available for access, therefore allowing the user to access the first data portion after the notification is sent.

Kim also discloses a system that downloads EPG information to a set-top box (see Column 4, Lines 16-28), and further discloses that upon update of the EPG data in the user's set-top box displayed a notification that the first data portion (updated EPG data) is available for access by the display of an icon (the notification). Also note Column 7, Lines 44-54 for a further example.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the EPG, as taught by Wang, using the update notification icon, as taught by Kim, for the purpose of preventing the viewer from becoming confused and also reserving an undesired program (see Column 7, Lines 48-50 of Kim).

Wang and Kim are silent as to how the data is actually processed by the software at the headend. The applicant's invention states the use of DSM-CC, which is an object

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oriented based carousel scheme for transmitting objects to a user. This is described in Balabanian on pages 125 ("Generic Interactive Application Services") and 126 ("Generic Broadband Application Services") for receiving various carousel objects using the object oriented class interfaces described in Figure 6 and the sections stated above. For example, on page 126, first column, lines 2-3, Balabanian states "The abstract interface First enables a client to obtain its first objects". Therefore, the basic principles of object oriented programming tells us that when a client wishes to receive it's first objects, the First class must be instantiated, which causes the data that is periodically transmitted (basic operation of a data carousel, see page 126, column 1, second paragraph of Balabanian) to be encapsulated and transmitted to the client, as stated by applicant in the claim limitations.

Therefore, Balabanian discloses the limitation of "wherein said first carousel object is associated with a carousel class that can encapsulate data periodically transmitted by the broadcaster".

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the carousel system, as taught by Wang and Kim, using the object oriented carousel system, as taught by Balabanian, for the purpose of providing protocols for generic broadband application services (see page 127, Column 1, "Conclusion" Section, Lines 8-10 of Balabanian).

Claim 22 corresponds to claim 21, where Wang discloses receiving a request for updates of said first data portion (see Column 9, Lines 41-43).

Wang also discloses determining whether said first data portion has been updated and sending an update notification when said first data portion has been updated (again see the rejection of claim 21 for updating and notifying the viewer).

Claim 25 corresponds to claim 21, where Wang discloses that said access to said first data portion is provided by creating a file system that represents data transmitted by said broadcaster (see Column 3, Lines 62-67 and Column 4, Lines 1-8 for creating a file system (linked EPG web pages (HTML files)), which are transmitted from a broadcaster and provides access to a first data portion).

Wang also discloses that a set of input and output functions are provided for said file system (see Column 4, Lines 55-58 for outputting the web pages to a TV display and Column 6, Lines 53-55 for inputting a selection to view one of the web pages).

Claim 26 corresponds to claim 25, where Wang discloses creating an object file (see the creation of HTML web pages, in the rejection of claim 25, and note that a plurality of linked HTML files is the file system and one HTML is the object file).

Claim 27 corresponds to claim 26, where Wang discloses that the files are transmitted using a carousel; therefore the web pages are carousel files (see Column 6, Lines 5-8).

Referring to claims 31-33, see rejection of claims 1-3, respectively.

Referring to claims 34-36, see rejection of claims 25-27, respectively.

Referring to claims 38-40, see rejection of claims 1 and 26-27, respectively.

3. Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (U.S. Patent No. 6,675,385) in view of Kim et al. (U.S. Patent No. 6,209,131) in

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further view of Balabanian et al. ("An Introduction to Digital Storage Media – Command and Control, November 1996) in further view of Skeen et al. (U.S. Patent No. 5,187,787).

Referring to claim 23, Wang, Kim and Balabanian teach all of the limitations in claim 22, as well as Wang disclosing determining whether said first data portion has been updated and sending an update notification when said first data portion has been updated (again see the rejection of claim 21 for updating and notifying the viewer), but fail to teach a subscription request.

Skeen discloses making a subscription request from a client to a server (see Column 20, Lines 9-19).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the information request system, as taught by Wang, Kim and Balabanian, to further allow a subscription request to be made, as taught by Skeen, for the purpose of allowing a user to receive data at specified periods over a period of time, alleviating the need to continually make requests for data from the same service provider.

Claim 24 corresponds to claim 23, where Skeen discloses sending a cancel request from a client to a server, in order to cancel a subscription (see Column 20, Lines 36-47).

4. Claims 28-30, 37 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (U.S. Patent No. 6,675,385) in view of Kim et al. (U.S. Patent No. 6,209,131) in further view of Balabanian et al. ("An Introduction to Digital Storage

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Media – Command and Control, November 1996) in further view of Sarfati et al. (U.S. Patent No. 6,478,222).

Referring to claim 28, Wang, Kim and Balabanian disclose the use of a carousel, but fail to disclose the use of the Java programming language (which inherently uses classes to process data requests (function calls to subroutines)) to produce the carousel file. Sarfati discloses a DSMCC-UU Package 65 (DSM-CC is the carousel type being used), which allows communication between a client and a server for data file search and reading (see Column 6, Lines 60-64), and the package is written in Java (see Column 5, Lines 48-49).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the carousel, as taught by Wang, Kim and Balabanian, using the Java implemented carousel, as taught by Sarfati, for the purpose of enabling independence between upper level applications 66 which are usually provided by the system manager or one or more operators, and a lower level operating system 51, usually implemented by the hardware manufacturer of the decoder (see Column 5, Lines 38-42).

Claim 29 corresponds to claim 28, where Sarfati also discloses instantiating a carousel file object (see Column 7, Lines 59-61).

Sarfati also discloses initiating a read operation on the carousel file object and waiting until the read operation successfully completes (see Column 10, Lines 6-8 and note that if a user requests to execute any of the applications, the user would inherently have to wait until execution is complete).

Claim 30 corresponds to claim 29, where Sarfati also discloses access is provided by a JAVA API (see Column 5, Lines 47-49).

Referring to claims 37 and 41, see rejection of claim 28.

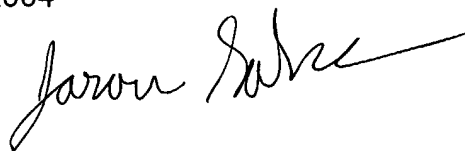
Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P Salce whose telephone number is (703) 305-1824. The examiner can normally be reached on M-Th 8am-6pm (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 26, 2004

A handwritten signature in black ink, appearing to read "Jason Salce", with a long horizontal stroke extending to the right.